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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,905	07/11/2003	Eckhard H. Kuesters	239274US20DIV	2522
22850	7590	06/17/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			MARKS, CHRISTINA M	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	

3713

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,905

Applicant(s)

KUESTERS, ECKHARD H.

Examiner

C. Marks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07112003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transparent outer cover must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englmeier (US Patent No. 5,423,549) in view of Barnhill (US Patent No. 5,112,055).

Englmeier discloses a golf ball with a spherical shaped body having a dimpled outer surface (FIG 3) that has a power source contained within the body (FIG 3). There is a transmitter coupled to the power source that emits an electromagnetic signal (Abstract). Englmeier also discloses a timing device configured to control transmission of the signal for a predetermined time after actuation (Abstract).

Englmeier discloses the timing device controls the transmission for a predetermined time after actuation. However, Englmeier does not disclose a switching device contained within the body that actuates due to a detected shock.

One skilled in the art would know that when transmitting signals relaying the location of an object, it would be strongly desired to transmit only when necessary as to not waste current, power, or overall capacity of energy.

Englmeier supports this fact in applying it to the tracking of golf balls in stating that a pulsed transmission signal is used for the purpose of energy saving and this switching transistor is controlled by the clock pulses generated by this control unit (Column 4, lines 60-65).

In incorporating this energy saving mechanism, Englmeier discloses a transmitter that can be turned on and off by a timer circuit (Column 2, lines 16-27) in order to limit the time during which the ball transmits. Further, Englmeier discloses that the transmissions may be controlled by a second timer circuit, which will delay the transmission for a predetermined amount of time (Column 2, lines 34-42).

However, transmission is wasted in Englmeier as transmission starts when the ball is removed from the charger, thus resulting in transmission when the ball is not in use. Englmeier lacks a means to enable the transmitter based upon a shock initialization to indicate that the ball is in use. Barnhill teaches of a shock-activated device within a golf ball to begin transmission upon impact (Abstract), thus limiting any transmission before the ball in play.

Based upon the energy-saving transmission teachings of Englmeier and Barnhill, it would have been obvious to one skilled in the art at the time of invention to save transmission time and energy by incorporating a means to automatically turn on the transmission upon impact and to disable the transmission after a certain time thus using the shock teachings of Barnhill to improve on the energy saving clocking of Englmeier by providing a more accurate indication of when the ball is in use, thus maximizing the potential to save energy.

Regarding claim 2, the combination of Englmeier and Barnhill discloses a timer configured to turn on based on the actuation of a switching device and turn off based upon a predetermined time.

Regarding claim 3, Englmeier discloses a transmitter that can be turned on and off by a timer circuit (Column 2, lines 16-27) in order to limit the time during which the ball transmits. Further, Englmeier discloses that the transmissions may be controlled by

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a second timer circuit, which will delay the transmission for a predetermined amount of time (Column 2, lines 34-42).

Regarding claim 4, the combination of references does not include at least one light emitting diode; however, the usage of such would be a design choice obvious to one of ordinary skill in the art. The incorporation of a light would not change the functionality of the transmitter and thus would be merely representative of a design wherein one of ordinary skill in the art would be motivated by the specifications for their system. These specifications motivate the designer based on the wants, needs and desires for their system. One would be motivated to use a light, for example, to aid a user in locating the ball at dusk conditions when playing golf is still possible, but locating the ball becomes more of a challenge. Thus, by incorporating a light, a skilled artisan would recognize the advantage to the user in terms of finding their ball and would be motivated by such in order to further supplement the users ability to find their ball as is the goal of both of the references.

Regarding claims 5-8 and 14-16, Englmeier discloses the transmitter emits frequencies to detect the golf ball and has the ability to detect different balls based on the signal associated with them ball. Englmeier also discloses a modulator capable of using a coded charge signal (for example pulse code modulation) in order to modulate the signal with player ID information in order for the user to be able to detect their ball (Column 5, lines 25-50).

Regarding claims 9 and 17, Englmeier discloses the power signal to be rechargeable (Column 2, lines 28-33).

Regarding claims 10-11 and 18-19, the outer cover is partially transparent to the electromagnetic signal as the signal is transmitted through it (FIG 3).

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,743,815: Golf ball with transmission means encased within the outer shell.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Marks whose telephone number is (703)-305-7497. The examiner can normally be reached on Monday - Thursday (7:30AM - 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (703)-308-1745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



cmm
June 14, 2004



JESSICA HARRISON
PRIMARY EXAMINER